

What is claimed is:

1 A device for converting kinetic energy into electrical energy comprising, a fast moving system, a second moving system for relative movement toward and away from said first moving system, an object for transfer between said first moving system and said second moving system for developing the kinetic energy relative thereto, means for converting the kinetic energy from said object at second moving system into electrical energy.

2 A device according to claim 1 further comprising discharge means for transferring said kinetic energy extracted object from said second moving system to said first moving system to develop the kinetic energy relative to said second moving system, and further kinetic energy extracting means for converting kinetic energy from said object at said first moving system into electrical energy.

3 A device according to claim 1 wherein said object is magnetizable.

4 A device according to claim 1 wherein said object is a rod for selective reciprocation between said first and second moving systems.

5 A device according to claim 3 wherein said means for converting the kinetic energy from said object into electrical energy has an electrically conductive coil.

6 A device according to claim 2 wherein said discharge means has an electrically conductive coil.

7 A device according to claim 1 wherein said first and second moving systems each have respective drive shafts coupled thereto, fly-wheels connected to said drive shafts and driven thereby, each of said fly-wheels having gear teeth, gears

meshing with said fly-wheel gear teeth, driven by and driving said meshing gears for selectively producing electrical energy and kinetic energy.

8 A device according to claim 4 wherein said rod comprises a shaft having a transverse array of ridges formed along the length thereof, and an end to said shaft, a tube for said second moving system for selective mating with said shaft, said tube having openings formed therein, and gears protruding through said respective openings, said gears meshing with said ridges and being driven thereby as said shaft reciprocates between said first and second moving systems, motor generators coupled to said gears and being driven thereby to selectively produce electrical power and to drive said shaft.